



**PATENT**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

**In re Application of:** Meulenberg et al.

**Serial No.:** 10/750,409

**Filed:** December 30, 2003

**For:** INFECTIOUS CLONES OF RNA  
VIRUSES AND VACCINES AND  
DIAGNOSTIC ASSAYS DERIVED  
THEREOF

**Examiner:** To be assigned

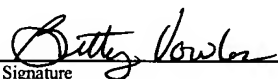
**Group Art Unit:** To be assigned

**Attorney Docket No.:** 2183-4041.4US

**CERTIFICATE OF MAILING**

I hereby certify that this correspondence along with any attachments referred to or identified as being attached or enclosed is being deposited with the United States Postal Service as First Class Mail on the date of deposit shown below with sufficient postage and in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

February 10, 2004  
Date

  
Signature

Betty Vowles  
Name (Type/Print)

**INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In compliance with the duty to disclose information material to patentability pursuant to 37 C.F.R. § 1.56, it is respectfully requested that this Information Disclosure Statement be entered and the documents listed on attached Form PTO/SB/08 be considered by the Examiner and made of record. Copies of the listed documents are enclosed pursuant to 37 C.F.R. § 1.98(a).

In accordance with 37 C.F.R. § 1.97(g) and (h), filing of this Information Disclosure Statement is not to be construed as a representation that a search has been made or an admission that the information cited herein is, or is considered to be, material to patentability as defined in 37 C.F.R. § 1.56(b). Further, no representation is made by Applicants herein that no other possible material information as defined in 37 C.F.R. § 1.56(b) exists.

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<u>U.S. Patent No.</u>	<u>Publication Date</u>	<u>Patentee</u>
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#US- 4,606,940	08/1986	Frank et al.
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Serial No.: 10/750,409

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#Pursuant to 37 C.F.R. § 1.98(d), copies of the previously identified patents are not being provided since they were previously cited by or submitted to the Office in the following prior application:

Serial No.: 09/874,626

Filed: 6/5/2001

For: INFECTIOUS CLONES OF RNA VIRUSES AND VACCINES AND DIAGNOSTIC ASSAYS DERIVED THEREOF, which application is being relied upon for an earlier filing date under 35 U.S.C. § 120.

In compliance with the duty to disclose information material to patentability pursuant to 37 C.F.R. § 1.56, Applicants hereby identify the following listed copending applications naming a common inventor(s):

Attorney Docket No.: 2183-4041.1US  
Serial No.: 6/5/2001  
Filing Date: 09/874,626  
Title: INFECTIOUS CLONES OF RNA VIRUSES AND VACCINES  
AND DIAGNOSTIC ASSAYS DERIVED THEREOF

Attorney Docket No.: 2183-5051US  
Serial No.: 09/948,747  
Filing Date: 9/7/2001  
Title: PRRSV VACCINE

Attorney Docket No.: 2183-2643.3US  
Serial No.: 10/226,065  
Filing Date: 8/21/2002  
Title: CAUSATIVE AGENT OF THE MYSTERY SWINE DISEASE,  
VACCINE COMPOSITIONS AND DIAGNOSTIC KITS

Attorney Docket No.: 2183-5584US  
Serial No.: 10/300,699  
Filing Date: 11/19/2002  
Title: CHIMERIC ARTERIVIRUS-LIKE PARTICLES

Attorney Docket No.: 2183-5911US  
Serial No.: 10/407,822  
Filing Date: 4/4/2003  
Title: ADAPTATION SITES OF PORCINE REPRODUCTIVE AND  
RESPIRATORY SYNDROME VIRUS

Attorney Docket No.: 2183-2643.4US  
Serial No.: 10/737,658  
Filing Date: 12/16/2003  
Title: CAUSATIVE AGENT OF THE MYSTERY SWINE DISEASE,  
VACCINE COMPOSITIONS AND DIAGNOSTIC KITS

Attorney Docket No.: 2183-4041.2US  
Serial No.: 10/745,949  
Filing Date: 12/23/2003  
Title: INFECTIOUS CLONES OF RNA RIVUSES AND VACCINES  
AND DIAGNOSTIC ASSAYS DERIVED THEREOF

Serial No.: 10/750,409

Attorney Docket No.: 2183-4041.3US  
Serial No.: 10/750,410  
Filing Date: 12/30/2003  
Title: INFECTIOUS CLONES OF RNA VIRUSES AND VACCINES  
AND DIAGNOSTIC ASSAYS DERIVED THEREOF

This Supplemental Information Disclosure Statement is believed to be filed before the mailing date of a first Office Action on the merits; therefore, no fee is due.

Respectfully submitted,



G. Scott Dorland, Ph.D.  
Registration No. 51,622  
Attorney for Applicant(s)  
TRASKBRITT, P.C.  
P.O. Box 2550  
Salt Lake City, Utah 84110-2550  
Telephone: 801-532-1922

Date: February 10, 2004  
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Enclosures: Form PTO/SB/08

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Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet

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of

11

**Complete if Known**

Application Number	10/750,409
Filing Date	December 30, 2003
First Named Inventor	Meulenberg et al.
Group Art Unit	To be assigned
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Attorney Docket Number	2183-4041.4US

**U.S. PATENT DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code <sup>2</sup> (if known)			
		#US-3,137,631	06/1964	Soloway	
		#US- 3,959,457	05/1976	Speaker et al.	
		#US- 4,015,100	03/1997	Gnanamuthu et al.	
		#US- 4,205,060	05/1980	Monsimer et al.	
		#US- 4,452,747	06/1984	Gersonde et al.	
		#US- 4,606,940	08/1986	Frank et al.	
		#US- 4,744,933	05/1988	Rha et al.	
		#US- 4,921,706	05/1990	Roberts et al.	
		#US- 4,927,637	05/1990	Morano et al.	
		#US- 4,944,948	07/1990	Uster et al.	
		#US- 5,008,050	04/1991	Cullis et al.	
		#US- 5,009,956	04/1991	Baumann	
		#US- 5,132,117	07/1992	Speaker et al.	
		#US- 6,268,199	07/2001	Meulenberg et al.	
		#US- 6,110,467	08/2001	Paul et al.	

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)				
		#EP 0 440 219 A1	08/1991	Schwiz, Serum- & Impfinstitut Bern		
		#0 529 584	8/1992	Boehringer Ingelheim Animal Health Inc.		
		#EP 0595436 A2	10/1983	Iowa State University Research Foundation, Inc.		
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		#WO 93/06211	04/1993	Benfield		
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		#WO 96/36356	11/1996	Boehringer Ingelheim Corporation		
		#WO 96/40932	12/1996	Halbur		

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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

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Sheet 2 of 11

**Complete if Known**

Application Number	10/750,409
Filing Date	December 30, 2003
First Named Inventor	Meulenberg et al.
Group Art Unit	To be assigned
Examiner Name	To be assigned
Attorney Docket Number	2183-4041.4US

**U.S. PATENT DOCUMENTS**

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		Number - Kind Code <sup>2</sup> (if known)			
		#US-5,476,778	12/1995	Chladek et al.	
		#US- 5,510,258	4/1996	Sanderson et al.	
		#US- 5,620,691	4/1997	Wensvoort et al.	
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		Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)				
		#0 587 780	3/1994	Stichting Centraal Diergeneeskundig Instituut		
		#0 610 250	12/1995	Akzo Nobel N.V.		
		#2 282 881	4/1995	Cyanamid Iberica S A		
		#2289279	11/1995	Cyanamid Iberica S A		
		#WO 92/21375	12/1992	Stichting Centraal Diergeneeskundig Instituut		
		#WO 93/03760	3/1993	Collins et al.		
		#WO 96/04010	2/1996	Regents of the University of Minnesota		
		#WO 96/06619	3/1996	Paul et al.		
		#WO 97/31651	9/1997	Schering Corporation		
		#WO 98/18933	5/1998	Bos-De Ruijter		
		#WO 98/50426	11/12/1998	Stichting Instituut voor Dierhouderij en Diergezondheid		
		#WO 98/55626	12/1998	Origen, Inc.		
		#WO 00/53787	09/2000	Stichting Dienst Landbouwkundig Onderzoek		
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		WO 93/07898	04/1993	Akzo N.V.		

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		Filing Date	December 30, 2003		
		First Named Inventor	Meulenberg et al.		
		Group Art Unit	To be assigned		
		Examiner Name	To be assigned		
Sheet	3	of	11	Attorney Docket Number	2183-4041.4US

<b>OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS</b>			
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Sheet	4	of	11	Attorney Docket Number	2183-4041.4US

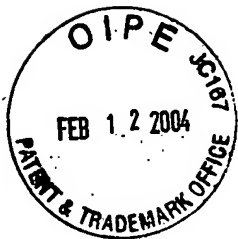
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11

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First Named Inventor

Meulenberg et al.

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<b>Substitute for form 1449A/PTO</b>  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)		<b>Complete if Known</b>			
		Application Number	10/750,409		
		Filing Date	December 30, 2003		
		First Named Inventor	Meulenberg et al.		
		Group Art Unit	To be assigned		
		Examiner Name	To be assigned		
Sheet	8	of	11	Attorney Docket Number	2183-4041.4US

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		#BRAMEL-VERHEIJE et al., Expression of a Foreign Epitope by Porcine Reproductive and Respiratory Syndrome Virus, 2000, Virology, pp. 380-389, Vol. 278.	
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Examiner Signature		Date Considered	
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		#MURTAUGH, M. P., et al., Abstract, Comparison of the Structural Protein Coding Sequences of the VR-2332 and Lelystad virus strain of the PRRS virus, Journal Arch. Virol. 140(8), pp. 1451-1460 (1995).	
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		#PCT International Search Report, PCT/NL 00/00152, dated July 6, 2000, 3 pages.	
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		#VAN DINTEN, L.D. et al., 1997, Proc. Natl. Acad. Sci. USA, 94(3):991-996.	
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		#PCT International Preliminary Examination Report, PCT/NL02/00314, dated August 26, 2003, 7 pages.	
		#NC_001961, Porcine reproductive and respiratory syndrome virus, complete genome.	
		#AF066183, Porcine reproductive and respiratory syndrome virus RespPRRS MLV, complete genome.	
		#AF325691, Porcine reproductive and respiratory syndrome virus isolate NVSL 97-7985 IA 1-4-2, complete genome.	
		#AF176348, Porcine reproductive and respiratory syndrome virus isolate PA8 complete genome.	
		#AF331831, Porcine reproductive and respiratory syndrome virus BJ-4, complete genome.	
		#AE005172, Arabidopsis thaliana chromosome 1, top arm complete sequence.	
		#NC_002534, Lactate dehydrogenase-elevating virus, complete genome.	
		#U87392, Porcine reproductive and respiratory syndrome virus strain VR-2332, complete genome.	
		#M96262, Lelystad virus, complete genome.	
		#AF184212, Porcine reproductive and respiratory syndrome virus strain SP, complete genome.	
		#AF159149, Porcine reproductive and respiratory syndrome virus isolate MLV RespPRRS/Repro, complete genome.	
		#AF046869, Porcine reproductive and respiratory syndrome virus isolate 16244B, 2/18/97 (Nebraska)pass.3, complete genome.	
		#U15146, Lactate dehydrogenase-elevating virus Plagemann strain, complete genome.	
		#VIIIth International Symposium on Nidoviruses (Corona and Arteriviruses), May 20-25, 2000.	

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STATEMENT BY APPLICANT**

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Sheet 11 of 11

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		MENGELING et al., Mystery Pig Disease: Evidence and considerations for its etiology, In: Proceedings of the Mystery Swine Disease Committee Meeting, October 6, 1990, Denver, Colorado, Livestock Conservation Institute, Madison, WI, USA.	
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#Pursuant to 37 C.F.R. § 1.98(d), copies of the previously identified patents are not being provided since they were previously cited by or submitted to the Office in the following prior application:

Serial No.: 09/874,626

Filed: 6/5/2001

For: INFECTIOUS CLONES OF RNA VIRUSES AND VACCINES AND DIAGNOSTIC ASSAYS DERIVED THEREOF, which application is being relied upon for an earlier filing date under 35 U.S.C. § 120.

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